

EXHIBIT C

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April 28, 2006

M. Jeanette Fedele, Attorney
Gillespie, Rozen, Watsky, Motley & Jones, P.C.
3402 Oak Grove Avenue
Suite 200
Dallas, Texas 75204

Re: Economic Assessment of Lost Compensation

Civil Action No.: SA-05-CA-0245-XR
Lauren Browning v. Southwest Research Institute

Dear Ms. Fedele:

I am responding to your request for an assessment of the value of Lauren Browning's past and future economic losses arising from the separation of her employment with Southwest Research Institute, San Antonio, Texas.

Background With a Ph.D. in Geosciences (1995) from the University of Tennessee and three years of experience in post-doctoral work at the University of Hawaii's Institute of Geophysics and Planetology (1995 to 1998), Lauren Browning accepted the position, Research Scientist, at the Southwest Research Institute in San Antonio, Texas, in December 1998. As a geoscientist, she began to work for the institute's Center for Nuclear Waste Regulatory Analysis. [1]

[1] According to the U.S. Department of Labor, Bureau of Labor Statistics, geoscientists "study the composition, structure, and other physical aspects of the Earth." (*Occupational Outlook Handbook, 2006-07 Edition, "Geoscientists,"* p. 1.) The

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As a new hire, Dr. Browning accepted a salary of \$45,000 with the understanding that it would rise to reach industry pay standards for similarly-qualified and experienced scientists in her field.

At the institute and the Center for Nuclear Waste Regulatory Analysis (CNWRA), Dr. Browning pursued a range of activities broadly characterized as conducting advanced research in her field and supporting the work of colleagues similarly engaged. She has described herself as the center's "technical and programmatic lead on issues related to the 'Quantity and Chemistry of Water Contacting the Waste Drip Shields and Waste Packages' in the proposed nuclear waste repository at Yucca Mountain, Nevada." During her work at the institute and the CNWRA, she "planned, coordinated, and controlled" her own research projects, which included developing and leading "multi-year transport modeling efforts, enlisting regular contributions from three different hydrologists." She "routinely synthesized information in ... programmatic efforts with the Nuclear Regulatory Commission (NRC)." She provided "significant programmatic support" for defining the "technical basis agreements between the [Department of Energy] and NRC related to the evolution of the near-field environmental chemistry at Yucca Mountain," and she "tracked the progress of these agreements through independent scientific analyses and evaluation of DOE documents." In her own words, usually her research efforts were group efforts. Dr. Browning has recently commented that "because the type of work that I did necessarily required the input of many others... I worked independently to organize and lead many group efforts." One of these efforts was serving as the invited co-chair of an international conference examining the "Scientific Basis for Nuclear Waste Management Symposium XXVIII." As typical of the efforts of the co-chair, Dr. Browning's conference-related work included selecting speakers, awarding travel stipends, reviewing abstracts, arranging panel discussions, reading manuscripts, editing and publishing proceedings, and working with symposium staff. She also served as the guest editor of the journal, *Computers and Geosciences*, spoke at university and scientific think tanks, and co-authored papers for technical journals and professional conferences.

Department's Standard Industrial Classification (SOC) states that geoscientists "may use geological, physics, and mathematical knowledge in exploration for oil, gas, minerals, or underground water; or in waste disposal, land reclamation, or other environmental problems." The SOC continues with the statement that geoscientists "may study earth's internal composition, atmospheres, oceans, and its magnetic, electrical, and gravitational forces. Include mineralogists, crystallographers, paleontologists, stratigraphers, geodesists, and seismologists." (www.bls.gov/soc/soce2e2.htm).

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In short, Dr. Browning was a scientist whose research efforts and other professional activities at the Center for Nuclear Waste Regulatory Analysis were highly focused on examining, modeling, and characterizing problems and issues surrounding one aspect of the management of nuclear waste in the United States.

Income and Earnings At SwRI and its Center for Nuclear Waste Regulatory Analysis, Dr. Browning's job classification throughout the duration of her employment there was the rank, SE-2. In a term of art borrowed from the field of human resources, this rank was generally entry level for all scientists at the institute. Very often, colleagues without advanced degrees in their fields held the rank, SE-2. For scientists with advanced degrees, their work efforts were better described by the duties and responsibilities of rank SE-3 and rank SE-4 and any rank above those two. Evidence indicates that Dr. Browning regularly performed the duties and responsibilities of scientists in rank SE-3 and rank SE-4.

While evidence suggests that Dr. Browning accepted the rank SE-2 at the time she was hired, she expected to move quickly toward a higher rank once she began performing the duties and responsibilities of the higher ranks, and once her experience, talents, and work efforts became known at SwRI. Needless to say, appointment to a higher rank signifies the ability to perform at a higher level of scientific inquiry, and she had become accustomed to performing at an advanced level of inquiry in her post-doctoral position in Hawaii. During her tenure at SwRI, however, Dr. Browning remained in the same rank until she separated from the institute in May 2004.

Table 1 summarizes Dr. Browning's salary history at the institute. The table indicates that between 1998 and 2004 her income grew at an average annual rate of 4.6 percent, with annual changes ranging from zero to 7.0 percent. Once the institute raised her salary, the average annual rate of increase was 5.5 percent (from 2000 to 2004).

To understand Dr. Browning's salary in the context of the salaries of other geoscientists, please refer to Appendix 1's **Table A1.1**. This table presents the record of annual salaries for geoscientists in the US and Texas as well as the annual salaries of persons holding the rank, SE-2 at SwRI, for the years 1998 through 2004. The table leaves little doubt that Dr. Browning's compensation during these years was significantly below the benchmark category, "chemists with the degree, Ph.D., working in government service," as well as the category, "geoscientists in Texas." At the same time, her salary at the institute consistently remained below that of many other scientists holding bachelor's and master's degrees unaccompanied by a terminal degree in their fields.

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Economic Loss At present Dr. Browning remains separated from employment with SwRI and the CNWRA.

The question is: what are her economic losses? How can these be characterized?

In exploring the issue of earnings losses following separation from SwRI, the question is: what would Dr. Browning's earnings have been if she had been able to remain employed with the institute?

Moreover, what kinds of offsetting, replacement income has she experienced and will anticipate experiencing?

A multi-table economic loss model has been developed to assess Lauren Browning's post-separation economic losses in this matter. The model presents four basic loss assessments (Tables 2.A, 2.B, 3.A, and 3.B).

Net Lost Past Compensation Two models of lost past income ("back pay") have been developed. In Table 2.A, net lost past income has been calculated by the usual method: *determine* what post-separation earnings would reasonably have been from time of separation to the scheduled time of trial in this matter (Column 3), and then *compare* these earnings to income earned since separation and expected to be earned through time of trial (Column 4). In this table the annual differences in these two columns, presented in Column 5, are lost income. Review and analysis of Table 2.A's traditional approach to measuring lost income indicates that by the time of trial, December 11, 2006, in this matter, Dr. Browning will have lost **\$152,940** (Column 5).

In Table 2.B, net lost past income has been assessed since the year 2002 (rather from the time of separation from the institute). The premise for this more extended estimate is: once Dr. Browning had experienced three full years of scientific research at the institute, her salary should have been commensurate with the average annual salary of experienced geoscientists working in the San Antonio labor market. Because it was not raised commensurately, losses began in 2002. Similar in method to Table 2.A, losses in this model are the difference between expected earnings (Column 3) and experienced earnings (Column 4). Losses here sum to **\$231,924** (Column 5).

In both tables, footnotes identify data sources relied on.

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Net Lost Future Compensation Likewise, there are two models of net lost future income. These models attempt to characterize reasonable expected future employment and earnings outlooks. The models recognize that if Lauren Browning had remained with SwRI for the remainder of her work life and had achieved income commensurate with that of an experienced geoscientist in San Antonio (Column 3 in both tables), she would have earned a total of \$1,686,085 between December 2006 and 2022.

At the same time the two models of lost future earnings examine realistic scenarios of replacement income. In Table 3.A the model assumes that Dr. Browning **does not find replacement employment** and earnings comparable to her former position at SwRI. Given the small market for geoscientists in San Antonio, a city where the dominant employer for these professionals is SwRI, this outlook scenario is reasonably likely. Consequently, her net future lost income is the same as her expected earnings at SwRI, \$1,686,085 (Columns 3 and 5), and the present value of lost income is **\$1,151,849** (Column 6).

In Table 3.B the model assumes that Dr. Browning accepts replacement employment as a secondary school teacher in San Antonio. Her starting salary (in 2008) is \$42,590 (based on income trends for secondary school teachers in the San Antonio labor market). This salary would be expected to grow by 3.1 percent annually, the recent historic trend rate of increase. Consequently, her future net lost income is \$886,954 (Column 5), and the present value of this loss is **\$617,939** (Column 6).

Documents Relied on and Additional References In addition to reviewing all of the employment and earnings data which your office and Dr. Browning provided during the past several months, I have reviewed and considered information cited below in determining the value of Lauren Browning's economics losses.

a) "The 2000-2010 Job Outlook in Brief," **Occupational Outlook Quarterly**, Bureau of Labor Statistics, U.S. Department of Labor, Spring 2002.

b) "Environmental Scientists and Geoscientists," **Occupational Outlook Handbook, 2006-07 Edition**, Bureau of Labor Statistics, U.S. Department of Labor, on the Internet at http://www.bls.gov/soc/soc_e2e2.htm (visited April 25, 2006).

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c) "Geoscientists," **Occupational Outlook Handbook, 2006-07 Edition**, Bureau of Labor Statistics, U.S. Department of Labor, on the Internet at <http://www.bls.gov/oco/ocos288.htm> (visited April 3 and 20, 2006).

d) "National Compensation Survey: Occupational Wages in the United States, July 2004," a report released by the U.S. Department of Labor, Bureau of Labor Statistics, August 2005.

e) **Economic Indicators**, publication of the Joint Economic Committee of Congress, June 2005 through the present.

f) **Monetary Trends**, Federal Reserve Bank of St. Louis, St. Louis, Missouri, January through March 2006.

g) **The Economic Report of the President 2005**, "Hours and earnings in private nonagricultural industries, 1959-2004," Table B-47, p. 350.

h) James Cieccka, Thomas Donley, and Jerry Goldman, "A Markov Process Model of Work-Life Expectancies Based on Labor Market Activity in 1997-98," **Journal of Legal Economics**, v 9, n 3, Winter 1999-2000.

i) Texas Workforce Commission, Wage Information Network (www.tracer2.com).

Conclusion In conclusion, this assessment indicates that Dr. Lauren Browning has experienced net lost past income ("back pay") ranging from **\$152,940** (Table 2.A) to **\$231,924** (Table 2.B) and net lost future income ranging from **\$617,939** (Table 3.B) to **\$1,151,849** (Table 3.A).

This report reflects my assessment as of late April 2006. Should additional information become available which would imply changes in Lauren Browning's expected earnings, expected earning capacity, or any other component of her employment and earnings, I would like to have the opportunity to re-consider any conclusions reached.

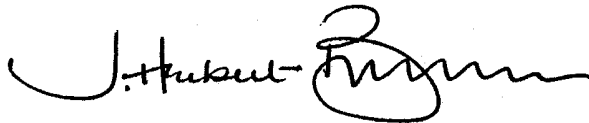
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At this time I am also attaching my Curriculum Vitae, a list of cases in which I have offered testimony between 1998 and the present, and my fee schedule.

I will follow up with a billing statement for services rendered to date.

After you have the opportunity to read and review this report, please do not hesitate to call me with any question which you may have.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. Herbert Burkman". The signature is fluid and cursive, with a large, stylized "B" at the end.

J. Herbert Burkman, Ph.D.

TABLE 1

LAUREN BROWNING'S ANNUAL EARNINGS
AT SOUTHWEST RESEARCH INSTITUTE

1998 TO 2004

(COL 1)	(COL 2)	(COL 3)	(COL 4)	(COL 5)
YEAR	AGE AT BIRTHDAY	ANNUAL SALARY @ SOUTHWEST RESEARCH	CHANGE IN INCOME	CHANGE IN INCOME
		(\$)	(\$)	(%)
1 1998	39	45,000 [1]		
2 1999	40	45,000 [2]	0	0.0%
3 2000	41	47,700 [3]	2,700	6.0%
4 2001	42	51,039 [4]	3,339	7.0%
5 2002	43	54,611 [5]	3,572	7.0%
6 2003	44	56,795 [6]	2,184	4.0%
7 2004	45	58,783 [7]	1,988	3.5%
Average				
Mean (1999 to 2004)			2,297	4.6%
Mean (2000 to 2004)			2,757	5.5%
Median			2,700	6.0%

- [1] Ms. Browning began working for Southwest Research Institute on December 07, 1998. Her starting salary was \$45,000 annually (SwRI_001159). This value is her annualized income.
- [2] In 1999 Ms. Browning's contract was renewed for another 12 month period at the same \$45,000 rate.
- [3] On March 11, 2000 Dr. Browning's annual salary was set at \$47,700 (SwRI_00159).
- [4] On March 17, 2001 Dr. Browning's annual salary was raised to \$51,039 (SwRI_00159).
- [5] On March 16, 2002 Dr. Browning's annual salary was raised to \$54,611 (SwRI_00159).
- [6] On March 15, 2003 Dr. Browning's annual salary was raised to \$56,795 (SwRI_00159).
- [7] On March 13, 2004 Dr. Browning's annual salary was raised to \$58,783 (SwRI_00159).

Note: Once annual increases began (in March 2000 Dr. Browning received her first of five increments in her annual salary at SwRI), the average rate of increase was 5.5%.

TABLE 2.A

SCENARIO 1: LAUREN BROWNING'S NET LOST PAST INCOME ("BACK PAY")

1998 TO 2006

(COL 1)	(COL 2)	(COL 3)		(COL 4)		(COL 5)	(COL 6)
YEAR	AGE AT BIRTHDAY	EXPECTED SALARY AT SOUTHWEST RESEARCH		EXPERIENCED SALARY AT SOUTHWEST RESEARCH		LOST INCOME (COL 3 - COL 4)	CUMULATIVE NET LOST INCOME
		(\$)		(\$)		(\$)	(\$)
1 1998	39	2,813	[1]	2,813	[5]	0	0
2 1999	40	45,000		45,000		0	0
3 2000	41	47,700		47,700		0	0
4 2001	42	51,039		51,039		0	0
5 2002	43	54,611		54,611		0	0
6 2003	44	56,795		56,795		0	0
7 2004	45	58,783	[2]	29,633	[6]	29,150	29,150
8 2005	46	62,016	[3]	0	[7]	62,016	91,166
9 2006	47	61,774	[4]	0	[8]	61,774	152,940
Total		440,531		287,591		152,940	

[1] In this model Dr. Browning's expected income (this column) between 1998 and 2004 is the salary determined by SwRI. In 2005 and 2006 her expected salary is growing at the average annual rate of increase experienced between 1998 and 2004. See Table 1.

[2] This value is Dr. Browning's annual salary. It was set on March 13, 2004 (SwRI_001159).

[3] In this model Dr. Browning's expected income grows by 5.5 percent annually (see Table 1).

[4] Growth is 5.5 percent (see footnote 3). This amount is for 11.33 months preceding the anticipated trial in this matter. Twelve months of income would result in total earnings in 2006 of \$65,435.

[5] This model does not observe lost income until 2004, the year in which Dr. Browning leaves the institute.

[6] In 2004 Dr. Browning earned \$29,633 during her employment with SwRI (see her W-2 Form for that year).

[7] Since her separation from Southwest Research Institute, Ms. Browning has not found employment and has no earnings.

[8] See footnote 7.

TABLE 2.B

SCENARIO 2: LAUREN BROWNING'S NET LOST PAST INCOME ("BACK PAY")

1998 TO 2006

(COL 1)	(COL 2)	(COL 3)		(COL 4)		(COL 5)	(COL 6)
YEAR	AGE AT BIRTHDAY	EXPECTED SALARY AT SOUTHWEST RESEARCH		EXPERIENCED SALARY AT SOUTHWEST RESEARCH		LOST INCOME (COL 3 - COL 4)	CUMULATIVE NET LOST INCOME
		(\$)		(\$)		(\$)	(\$)
1 1998	39	2,813	[1]	2,813	[7]	0	0
2 1999	40	45,000		45,000		0	0
3 2000	41	47,700		47,700		0	0
4 2001	42	51,039		51,039		0	0
5 2002	43	71,101	[2]	54,611		16,490	16,490
6 2003	44	73,120	[3]	56,795		16,325	32,815
7 2004	45	75,363	[4]	29,633	[8]	45,730	78,545
8 2005	46	77,714	[5]	0	[9]	77,714	156,259
9 2006	47	75,665	[6]	0	[10]	75,665	231,924
Total		519,514		287,591		231,924	

[1] In this model Dr. Browning's expected income (this column) between 1998 and 2001 is the salary determined by SwRI.

[2] In this model her salary after 2001 is equivalent to the salary paid to experienced geoscientists in the San Antonio labor market. See Texas Workforce Commission, Wage Information Network, San Antonio MSA, Texas (www.tracer2.com).

[3] Texas Workforce Commission, San Antonio MSA, experienced annual salary for geoscientists in 2003 (www.tracer2.com).

[4] Texas Workforce Commission, San Antonio MSA, experienced annual salary for geoscientists in 2004 (www.tracer2.com).

[5] In this model Dr. Browning's expected annual salary grows by 3.12 percent annually, the average annual rate of increase in the earnings of experienced geoscientists in San Antonio between 1999 and 2004 (www.tracer2.com).

[6] In this model her salary continues to grow at 3.12 percent annually. See footnote 5.

Note that her salary for 12 months would have been \$80,139 ($\$77,714 \times 1.0312$). \$75,665 is her expected salary from from January 01 through the time of trial scheduled in this matter.

[7] This model first observes lost income in 2002. See footnote 2 above.

[8] In 2004 Dr. Browning earned \$29,633 during her employment with SwRI (see her W-2 Form for that year).

[9] Since her separation from Southwest Research Institute, Ms. Browning has not found employment and has no earnings.

[10] See footnote 9.

TABLE 3.A

SCENARIO 1: LAUREN BROWNING'S NET LOST FUTURE INCOME ("FRONT PAY")
THROUGH THE REMAINDER OF HER WORK LIFE [1]

2006 TO 2022

(COL 1)	(COL 2)	(COL 3)	(COL 4)	(COL 5)	(COL 6)	(COL 7)
YEAR	AGE AT BIRTHDAY	EXPECTED ANNUAL EARNINGS	EXPECTED EARNINGS IN REPLACEMENT POSITION	LOST INCOME (COL 3 - COL 4)	PRESENT VALUE OF NET LOST INCOME	CUMULATIVE PRESENT VALUE OF LOST INCOME
		(\$)	(\$)	(\$)	(\$)	(\$)
1 2006 (12-11 to 12-31)	47	4,474 [2]	0 [4]	4,474	4,474	4,474
2 2007	48	82,639 [3]	0 [5]	82,639	79,081	83,555
3 2008	49	85,218	0	85,218	78,036	161,592
4 2009	50	87,876	0	87,876	77,006	238,597
5 2010	51	90,618	0	90,618	75,989	314,586
6 2011	52	93,446	0	93,446	74,985	389,572
7 2012	53	96,361	0	96,361	73,995	463,567
8 2013	54	99,367	0	99,367	73,018	536,585
9 2014	55	102,468	0	102,468	72,054	608,639
10 2015	56	105,665	0	105,665	71,102	679,741
11 2016	57	108,961	0	108,961	70,163	749,905
12 2017	58	112,361	0	112,361	69,237	819,141
13 2018	59	115,867	0	115,867	68,322	887,464
14 2019	60	119,482	0	119,482	67,420	954,884
15 2020	61	123,210	0	123,210	66,530	1,021,414
16 2021	62	127,054	0	127,054	65,651	1,087,065
17 2022	63	131,018	0	131,018	64,784	1,151,849
Total		1,686,085	0	1,686,085	1,151,849	

[1] In this scenario comparison is made between a forecast of the expected annual earnings of an experienced geoscientist in San Antonio (Column 3: based on historic trends in the earnings of this group) and expected annual earnings based on average earnings of all geoscientists in San Antonio (Column 4: based on historic trends in the earnings of this series). At the time of her termination on 5-21-04, Ms. Browning had a remaining work life expectancy of 17.99 years. See James Cieka, Thomas Donley, and Jerry Goldman, "A Markov Process Model of Work-Life Expectancies Based on Labor Market Activity in 1997-98," *Journal of Legal Economics*, vol. 9, no. 3, Winter 1999-00, p. 60.

[2] 2006 salary data is prorated forward from the estimated trial date of December 10 (.67 months). 2006 salary data is derived by increasing 2005 average salary, \$77,714, by 3.12%.

[3] In this model the annual earnings of experienced geoscientists increases by 3.12 percent, the recent average increase for this series in the period 1999 through 2004 (www.tracer2.com).

[4] In this model Dr. Browning does not find employment until January 2007.

[5] This model recognizes the difficulty of finding a comparable position (an experienced geoscientist with a research group) in the San Antonio labor market

TABLE 3.B

SCENARIO 2: LAUREN BROWNING'S NET LOST FUTURE INCOME ("FRONT PAY")
THROUGH THE REMAINDER OF HER WORK LIFE [1]

2006 TO 2022

(COL 1)	(COL 2)	(COL 3)		(COL 4)		(COL 5)	(COL 6)	(COL 7)
YEAR	AGE AT BIRTHDAY	EXPECTED ANNUAL EARNINGS		EXPECTED EARNINGS IN REPLACEMENT POSITION		LOST INCOME (COL 3 - COL 4)	PRESENT VALUE OF NET LOST INCOME	CUMULATIVE PRESENT VALUE OF LOST INCOME
		(\$)		(\$)		(\$)	(\$)	(\$)
1 2006 (12-11 to 12-31)	47	4,474	[2]	0	[4]	4,474	4,474	4,474
2 2007	48	82,639	[3]	0	[5]	82,639	79,081	83,555
3 2008	49	85,218		42,590		42,628	39,036	122,591
4 2009	50	87,876		43,919		43,958	38,520	161,111
5 2010	51	90,618		45,289		45,329	38,011	199,122
6 2011	52	93,446		46,702		46,744	37,509	236,631
7 2012	53	96,361		48,159		48,202	37,014	273,645
8 2013	54	99,367		49,662		49,706	36,525	310,171
9 2014	55	102,468		51,211		51,257	36,043	346,214
10 2015	56	105,665		52,809		52,856	35,567	381,781
11 2016	57	108,961		54,457		54,505	35,097	416,878
12 2017	58	112,361		56,156		56,205	34,634	451,512
13 2018	59	115,867		57,908		57,959	34,176	485,688
14 2019	60	119,482		59,714		59,767	33,725	519,413
15 2020	61	123,210		61,577		61,632	33,280	552,693
16 2021	62	127,054		63,499		63,555	32,840	585,533
17 2022	63	131,018		65,480		65,538	32,407	617,939
Total		1,686,085		799,131		886,954	617,939	

[1] In this scenario comparison is made between a forecast of the expected annual earnings of an experienced geoscientist in San Antonio (Column 3: based on historic trends in the earnings of this group) and expected annual earnings based on average earnings of all geoscientists in San Antonio (Column 4: based on historic trends in the earnings of this series). At the time of her termination on 5-21-04, Ms. Browning had a remaining work life expectancy of 17.99 years. See James Cieka, Thomas Donley, and Jerry Goldman, "A Markov Process Model of Work-Life Expectancies Based on Labor Market Activity in 1997-98," *Journal of Legal Economics*, vol. 9, no. 3, Winter 1999-00, p. 60.

[2] 2006 salary data is prorated forward from the estimated trial date of December 10 (.67 months). 2006 salary data is derived by increasing 2005 average salary, \$77,714, by 3.12%.

[3] In this model the annual earnings of experienced geoscientists increases by 3.12 percent, the recent average increase for this series in the period 1999 through 2004.

[4] In this model Dr. Browning does not find employment until January 2007.

At this time her income is based on the recent annual mean income of geoscientists in San Antonio.

[5] This model assumes that Dr. Browning would find employment with annual income similar to her former salary level (now larger with annual increases in 2004 through 2006).

APPENDIX 1

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Appendix 1: Table A1.1

**Comparison of Annual Salaries:
Chemists in the US, Geoscientists in Texas, Scientists/Engineers 2 at SWRI,
and Lauren Browning**

1998 to 2004

Year	Median Annual Salary: Geoscientists and Chemists			Lauren Browning's Annual Salary
	U.S.A.	Texas	SwRI	
	(Chemist)	(Geoscientist)	(Scientist/ Engineer Average)	
			(SE-2)	
	(\$)	(\$)	(\$)	(\$)
1998	(n.a.)	(n. a.)	(n.a.)	45,000 [11]
1999	(n.a.)	82,303 [6]	(n.a.)	45,000
2000	80,000 [1]	85,787	(n.a.)	47,700
2001	84,800 [2]	89,043	56,629 [7]	51,039
2002	89,000 [3]	90,528	55,531 [8]	54,611
2003	91,000 [4]	93,098	56,364 [9]	56,795
2004	95,000 [5]	95,954	58,055 [10]	58,783
Average				
Mean	87,960	89,452	56,645	51,275

[1] See American Chemical Society's "ChemCensus" for 2000. \$80,000 is the median annual salary for a Ph.D. working in the government sector (not in industry or academia, the two remaining broad employment categories) in 2000. Reported in C&EN, August 14, 2000, p. 46.

[2] C&EN, August 20, 2001, p. 52.

[3] C&EN, August 05, 2002, p. 38.

[4] C&EN, August 04, 2003, p. 38.

[5] C&EN, August 16, 2004, p. 27.

[6] Texas Workforce Commission, Wage Information Network (WIN), statewide median wage data for geoscientists, except hydrologists and geographers.

See www.tracer2.com (TWC website). For all years in this column.

[7] See Bates-stamped document SwRI_00457; SE-2 average salary in 2001.

[8] See Bates-stamped document SwRI_00478; SE-2 median salary in 2002.

[9] See Bates-stamped document SwRI_00615; SE-2 median salary in 2003.

[10] See Bates-stamped document SwRI_00633; SE-2 median salary in 2004.

[11] Ms. Browning was hired by Southwest Research Institute on 12-7-98 at a salary of \$45,000 annually. All annual salaries in this column are reported in Bates-stamped document SwRI_001159.

Note: Dr. Lauren Browning has stated that the job responsibilities of her position at SWRI were similar in nature and scope to those of the institute's job category, SE-4. SE-4 salary data were not provided to this analyst.

EXHIBIT D

COPY

John Herbert Burkman, Ph.D.

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IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
SAN ANTONIO DIVISION

LAUREN BROWNING, *
Plaintiff, *
VS. * CIVIL ACTION NO.:
SOUTHWEST RESEARCH INSTITUTE, *
Defendant. * SA-05-CA-0245-FB

ORAL VIDEOTAPED DEPOSITION OF
JOHN HERBERT BURKMAN, PH.D.

ANSWERS AND DEPOSITION OF JOHN HERBERT BURKMAN, PH.D.,
produced as a witness at the instance of the Defendant,
taken in the above-styled and -numbered cause on the 14th
day of June, 2006, A.D., beginning at 10:15 a.m., before
Kelly Hassell, a Certified Shorthand Reporter in and for
the State of Texas, in the offices of Gillespie, Rozen,
Watsky, Motley & Jones, P.C., located at 3402 Oak Grove
Avenue, Suite 200, Dallas, Texas, in accordance with the
Federal Rules of Civil Procedure and the agreement
hereinafter set forth.

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1 MS. FIDELE: I'm going to object. That goes
2 beyond the expert's expertise, but you may answer.

3 A Okay. I -- I probably don't have an expectation
4 of what she would do but from experience, I would -- I see
5 people looking broadly.

6 Q (BY MS. BENEDICT) Are you familiar with other
7 areas in addition -- we've talked about the oil industry
8 where geologists are typically thought of having employment
9 opportunities. Can you identify for me other areas in
10 which you would -- that you were aware of geochemists --
11 geochemist, geologists or geoscientists having employment
12 opportunities in industries that are not oil related?

13 A Well, there's the whole field of education. She
14 could work in academia. Now with a Ph.D. she could be a
15 teacher. Certainly could be -- she could start in a
16 university, I would expect, as at least an assistant
17 professor of geoscience. And if she chose that as her
18 field -- I mean as a -- as a category of employment, she
19 could probably move ahead. Of course, there are many -- I
20 mean that's one possibility. A Ph.D. has -- has that
21 opportunity, work in a university. She could work at a
22 community college. As I identified in my report, I think
23 she certainly could work in a high school with some
24 certification, I suspect would be needed, but that wouldn't
25 be a big hurdle.

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1 She could work for a minerals firm, copper,
2 mining operation, I suspect, or in a position -- again,
3 she's a -- she sees herself in -- in -- well, for lack of a
4 better term, I think she was working on water issues with
5 the Yucca flats or Yucca mountain project. She probably
6 could work in a water resources, wherever firms are --
7 are -- are needing someone to address water-related issues
8 in their own production. For example, on mine, that mine
9 operation certainly could disturbing water rights and water
10 tables. That would be -- I'm just thinking out loud as an
11 area I would see she could be employed as. If she's a
12 chemist, then I guess there are all kinds of mineral
13 related chemical opportunities. I don't know where they
14 are. I haven't done that research, but that would be
15 something that she could do and I also looked in the -- the
16 industry survey data, the salary survey data. By and
17 large, the people are divided between minerals and oil
18 production, government related jobs and academics. And, of
19 course, we know she had a quasi government-related job.

20 Q Doing work related to the NRC's contracts?

21 A Correct.

22 Q Did Dr. Browning express to you in the
23 conversations that she pursued any employment opportunities
24 in the minerals and oil fields?

25 A I don't recall that she did. I just recall her

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1 saying, "I have looked and looked in San Antonio and,
2 Dr. Burkman, I just have had no responses."

3 Q Did she indicate to you whether she had applied
4 for any positions or sought employment opportunities at any
5 of the education institutions or academia generally?

6 A She did. I won't say I took notes this, but she
7 told me that UT San Antonio had essentially no program that
8 she could teach in.

9 Q And why was that? Did she express that to you?

10 A They didn't have the program. In other words, I
11 don't believe that her specialty is a department at UTSA.

12 Q Did you check into that?

13 A I did not.

14 Q Did she indicate to you any of the other
15 educational institutions in the San Antonio area to which
16 she made any type of inquiry?

17 A There we did not talk about anything but UTSA.

18 Q And let me make sure I understand the
19 conversation as it relates to UTSA. Did Dr. Browning
20 relate to you that she had applied at UTSA or had completed
21 of her own accord that they did not have a department where
22 she would benefit?

23 Q Well, I asked her is there any possibility --
24 when she was telling me how sparse the opportunities were,
25 I said, Well, would there be any opportunity of teaching at

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1 UT San Antonio. And I almost can remember her responses,
2 They don't have -- they don't have a department that would
3 use me. She didn't -- that's not the quote but it's
4 something like that. Her discipline, geosciences, does not
5 have a department at UT San Antonio and, of course, I had
6 no reason to doubt that or to go check that but it is my
7 experience that universities do and do not have various
8 departments. You never know what they have until you look.
9 Apparently she had looked.

10 Q Did she tell you that she had gone to UTSA to
11 apply or speak with anyone in the science fields at UTSA to
12 further her inquiry or this was simply her own conclusion?

13 MS. FIDELE: Objection; asked and answered.

14 A Yeah, I think it's the latter. I do not recall
15 that she told me she went to the university or inquired
16 directly. She seemed to know. Well, I guess being in that
17 field she should know what -- just like I know what
18 universities in Dallas have economics programs, I would
19 expected she would know what programs exist for her
20 discipline.

21 Q (BY MS. BENEDICT) But is it correct, Dr.
22 Burkman, that she that made that conclusion or statement to
23 you and did not give you any background on how she achieved
24 or reached that conclusion?

25 A Yes.

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1 That -- I mean, there are, of course, jobs for economists
2 but they're not as widespread as one would think.

3 Q And so in determining what is a reasonable amount
4 of time in order to return to the workforce -- to find
5 other employment and return to workforce, do you rely on
6 any sort of professional studies that, in fact, reflect the
7 average length of time for an individual to return to the
8 workforce depending on the nature of their education,
9 experience and skills?

10 A I don't rely on any other studies. I do know
11 that the Department of Labor, Bureau of Labor Statistics,
12 has a -- an index or a weekly number that -- a number that
13 talks about the number of weeks of typical unemployment for
14 various specialties. But I find those numbers to be
15 national in their -- in their scope. They're not related
16 to the specific region and I find them generally to be not
17 useful and somewhat unrealistic. They're -- my experience
18 is different from those numbers.

19 Q Is your testimony, Dr. Burkman, that the index
20 studies that are published, I think you said -- I'm not
21 sure of the frequency that they're published -- but that
22 those index studies on the average amount of time for --
23 which it would take someone to find employment in their
24 area is less reliable than your own personal interpretation
25 of what is reasonable?

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1 zero replacement employment for just leaving the workforce.
2 Usually, my -- if I have zero dollars in replacement
3 employment, it's because they're not finding a similar job
4 in the region they're working.

5 Q Did you use in your methodology, in any capacity,
6 the BLS indexes on return to work averages for professions
7 such as that held by Dr. Browning?

8 A I did not.

9 Q Did you review the test -- review those indexes
10 in any fashion to even know what the average length of time
11 of unemployment was for a person with Dr. Browning's
12 experience -- experience and education?

13 A The quick answer is no, I didn't turn to those
14 records but I know from review that, even if you just look
15 at all professions, not the subcategory geoscientists, the
16 average in the United States is about 14 weeks which far is
17 under where Lauren Browning finds herself today.

18 Q You said that's the average for all professions,
19 is 14 weeks?

20 A Yes. I mean, average duration of unemployment in
21 the United States for everyone. I mean, if someone becomes
22 unemployed, he or she could expect on average to be absent
23 14 weeks. Of course, some are absent three weeks and some
24 are absent for a year.

25 Q And does that average of 14 weeks -- well, strike

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1 that.

2 Do -- you say that is the average for all
3 jobs. Do you have any more refined information as to
4 individuals in a professional capacity holding a advanced
5 degree in a sciences field?

6 A It doesn't break down like that but it -- we
7 could probably find the number of weeks absent from the
8 workforce for scientists. We wouldn't find it for -- more
9 than likely, we will not find it for geoscientists. It's
10 not broken like that. It's more by -- by job titles, like
11 manager, supervisor, nurse. I don't think we'll -- we'll
12 never find it for hydrologist.

13 Q Do you know what that number is for scientists?

14 A Not currently, I don't. I've seen it but I don't
15 know it now.

16 Q Do you know if it was in excess or less than 14
17 weeks?

18 A I think it's in excess.

19 Q Do you know approximately by how much?

20 A I don't.

21 Q Do you know if it exceed 104 weeks?

22 A I don't know as I sit here. I would tell you
23 it's highly unlikely.

24 Q Somewhere we have the exhibits that we were
25 talking about earlier, the one I handed you by which you

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1 You give Dr. Browning no replacement income
2 for the entirety of 2005 and the entirety of 2006?

3 A That's right.

4 Q You assume in that calculation that from May 2004
5 through trial, December 2006, Dr. Browning will have zero
6 replacement income?

7 A Right. I guess I would quibble maybe a tad with
8 you're assume. We -- because the assumption really is
9 from -- for all intents and purposes, from now forward,
10 because we know, like, through today she hasn't had any
11 income. Although when I wrote the report, it was through
12 April 28th for the year 2006. The year 2005 is not an
13 assumption on my part because, as you know, it's a fact.

14 Q Right.

15 A Well, let's put it this way: Nobody has told me
16 there is no evidence to the effect that she had income.
17 So, yeah, we assume it's a fact that she didn't.

18 Q Very good.

19 And you are assuming that for 2006 she will
20 not have any income between what you currently know and
21 trial date in approximately December 2006?

22 A Yes.

23 Q And as we talked earlier in the deposition, in
24 the period of approximately two and-a-half years, which
25 would be -- what is that -- 130 weeks of inability to

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1 return to the workforce, would you say that two and-a-half
2 years is -- exceeds the average that it takes a person with
3 Dr. Browning's skills, experience and education to return
4 to the workforce?

5 MS. FEDELE: Objection; calls -- asks the
6 witness to testify beyond his scope of expertise.

7 A I don't know the exact time for someone of her
8 education, skills, credentials, but I do feel very
9 confident in answering that question with a, yes, it does
10 exceed from what we know from the Bureau of Labor
11 Statistics.

12 Q (BY MS. BENEDICT) Do you know of -- strike that.
13 Had Dr. Browning found replacement income in
14 less than the 130 weeks that you are providing for here,
15 would that income go to offset the amount of your
16 calculation of lost income at 152,940?

17 A Yes.

18 Q Table 2.B on the next page --

19 A Yes.

20 Q -- if you could, Dr. Burkman, explain to me the
21 representation intended by Table 2.B.

22 A This table is intended to say if Dr. Browning's
23 salary had been, beginning in the year 2002 -- had been,
24 beginning in the year 2002, similar to the salary of an
25 experienced geoscientist in the San Antonio labor market,

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1 she -- it's assumed that she never finds work in the field
2 of nuclear waste regulatory analysis or nuclear waste
3 analysis and largely for a regulatory agency, and she is --
4 that is being juxtaposed against the expected future salary
5 for experienced geoscientists in San Antonio.

6 Q So -- and to make clear there, the Column 3 is,
7 again, using the MSA tracer 2 data for experienced
8 geochemists, geoscientists in the San Antonio area?

9 A Yes.

10 Q It is not based on any actual salary ranges for
11 SWRI scientists, whether SE-1, 2, 3, 4, 5, 6 or 7?

12 A You are right.

13 Q And your assumption in Column 4 is that
14 Dr. Browning does not work another day in her life; is that
15 correct?

16 A That is true. Right. That's a worst-case
17 scenario.

18 Q How realistic do you think that scenario to be?

19 A Well, based on her experience to date, it is
20 realistic. But one would hope that she finds a job and,
21 therefore, this doesn't occur. I mean, you know, if you
22 say -- if you ask me, is this realistic, well, thinking of
23 nuclear waste analysts looking at systems and patterns of
24 how nuclear waste can be -- the problems of nuclear waste
25 can be solved, probably in San Antonio, I don't know that

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1 there's an agency outside SWRI that would handle this. So
2 this is probably realistic. But when she states, narrowly
3 defined in that field, perhaps it's not true that -- or
4 perhaps you get tired of looking and cast her net wider to
5 non-nuclear waste geoscientific work.

6 Q And as you've already testified, Dr. Browning
7 was, in fact, doing non-nuclear scientific work prior to
8 coming to the institute, correct?

9 A Yes.

10 Q So would you also agree that she was fully
11 qualified to resume geochemist or geoscience work in the
12 non-nuclear field, as was reflected by her experience?

13 MS. FEDERLE: Objection; calls for testimony
14 outside the witness's scope of expertise.

15 A I would expect that she would she -- I would
16 expect that she would eventually cast her net wider.

17 Q (BY MS. BENEDICT) And, in fact, she has the
18 experience to do so as well, does she not?

19 MS. FEDERLE: Objection; calls for testimony
20 outside the witness's expertise.

21 A She appears to have the experience.

22 Q (BY MS. BENEDICT) And under Column 4 and the
23 representation of Table 3.A, it is -- it is making the
24 assumption that a woman at the time of 2006 -- and I think
25 we said she would be approximately 48. Did we have her --

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1 A -- what my footnote says.

2 Q -- could very well be reading it wrong.

3 A Okay.

4 Q I wouldn't doubt it.

5 A Let me see.

6 Well, I think what I was doing was borrowing
7 from the first footnote of Table 2.A and then editing it
8 all wrong. So there is a problem with this footnote. I
9 truly want to say that this -- as I said, it is a
10 worst-case scenario. But my third line can't work in this
11 context, because the third line says, the average earnings
12 of all geoscientists in San Antonio, Column 4, based on
13 historic trends.

14 Well, there is no historic trend there.
15 I've -- I've assumed away her ability to fit into the
16 marketplace and zeroed out income. As I said, that was the
17 purpose of this. So I've got a little problem. We really
18 ought to edit Footnote 1 and more or less get rid of the
19 entire part of Line 3 and make it -- make the sentence end
20 somehow after Line 2's final phrase.

21 Q Or might I suggest to you, Dr. Burkman, that the
22 zero replacement income was never intended to be your
23 assumption and I would propose that to you. If you look at
24 Footnote 4 you, in fact, state, "In this model,
25 Dr. Browning does not find replacement until January of

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1 2007," which would indicate in January 2007 she does find
2 replacement income.

3 MS. FEDELE: Objection; misleading.

4 MS. BENEDICT: It's a question.

5 MS. FEDELE: The witness has stated that
6 there is an error in Footnote 1.

7 MS. BENEDICT: I'm asking about Footnote 4.

8 THE WITNESS: Right.

9 MS. FEDELE: I believe -- I'm just going to
10 stick to the objection. I believe it calls for a
11 misleading answer.

12 A Right. Okay. I did -- as I made up these two
13 forecasts, one to show a worst-case scenario, I really
14 intended Footnote 5 to be Footnote 5, where we haven't gone
15 yet, Table 3.B. She ends up finding employment. And so as
16 I -- as I didn't edit column -- I'm sorry -- as I didn't
17 edit Line 3 of Footnote 1 very well, I also didn't edit or
18 state Footnote 5 of Table 3.A very well.

19 4 and 5 really should somehow have a
20 combination, because Footnote 5 is really where I intended
21 to go. This model recognizes the difficulty of finding a
22 comparable position, and there is some -- there is -- I
23 tend to sometimes edit these footnotes and copy to another
24 table, and that's exactly what happened here. And it
25 didn't -- it didn't serve me well.

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1 salary of 75,665.

2 Q And so to clarify, it is the 3.12 percent which
3 was the annual increase you're applying now?

4 A Yes.

5 Q But it is based on the theoretical expected as
6 opposed to the reality of her actual salary earnings at
7 SWRI?

8 A Yes.

9 MS. FEDELE: Objection; mischaracterization.

10 Q (BY MS. BENEDICT) Another -- referring to Table
11 2.A, that's where we use the actual salary plus the 5.5
12 percent increase for years going forward that she was not
13 there through 2006?

14 A Yes.

15 Q Another method of doing what you did in 3.A and
16 3.B would be to continue your 5.5 or 3.12 based on the 2006
17 salary reflected in 2.A, but you did not utilize that
18 method?

19 A I did not.

20 Q You used the theoretical expected salary?

21 MS. FEDELE: Objection; mischaracterization.

22 A I used -- well, yeah, theoretical expected might
23 be -- no. Well, I quibble with that term. I would say
24 it's the expected salary of a geoscientist experienced in
25 San Antonio.

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1 Q Not her actual salary?

2 A Correct.

3 Q And did you run a calculation in your various
4 drafts using the 2.A model through age 63?

5 A I did not.

6 Q Would that be a reasonable alternative comparison
7 to have made?

8 A Using the term "reasonable," and I like that
9 term, yes, I could have done that. I tend to not want to
10 give the reader too many scenarios, but that is sort of a
11 complement to 2.A, as you said. I didn't do it.

12 Q And I interrupted you then on -- to make sure I
13 understood what Column 3 represented and now I do
14 understand that.

15 And so back to Table 3.B. You've explained
16 what 3 -- Column 3 is and you were giving the rest of the
17 scenario.

18 A Right. Okay. And we all know what Column 3 is.
19 We're all very clear on that. In both tables it's the
20 same.

21 Yeah, Column 4, what I've done here -- and
22 I -- I need to -- I didn't footnote it well. I'm going to
23 assume that she takes the job of a high school teacher and
24 sort of gets the typical income. Now, I don't think I
25 looked at high school science teachers. I don't think you

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1 that being in the future, this number on 3.B, Column 4, is
2 a forecast.

3 Q Uh-huh.

4 A Now, is it a forecast based on entry wages in
5 2005 grown to 2008, or is it an entry based on experienced
6 grown to 2008? I'm sure -- I didn't footnote it, but I'm
7 sure I would not have called her an experienced teacher.

8 Q Okay.

9 A I think I -- I think that's an entry level wage.

10 Q And you thought the growth was three percent?

11 A Yes. Again, I probably ought to check that, but
12 when I'm looking long term for wages and salaries in the
13 U.S., I know that the vast majority of people raise their
14 incomes on average about three percent a year. When I
15 don't have something very specific, I'll fall back to that.

16 Q And as I understand what you're explaining to me,
17 that Column 4 is intended to be high school -- high school
18 teacher salary?

19 A Yeah. I would say public school, but I think of
20 her as primarily teaching high school.

21 Q And again, Dr. Burkman, is it correct that
22 Footnote 1 would indicate Column 4 is, in fact, the average
23 earnings of all geoscientists in the San Antonio area based
24 on the MSA?

25 A Right. And that's a problem of copying data,

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1 because I copied and didn't -- didn't edit out the
2 word "geoscientist" to mean the average earnings of school
3 teachers. That word "geoscientists" in Line 3 should not
4 be in there. It's just a -- probably comes all the way in
5 because -- I hate this idea sometimes when we use word
6 processing that we copy and forget to edit, but --

7 Q And so you're saying, on Line 3, average earnings
8 of all geoscientists you believe should read, average
9 earnings of all --

10 A Teachers.

11 Q Teachers.

12 A And the same way in Footnote 4. At this time her
13 income is based on the recent annual mean income of
14 teachers in San Antonio. And actually, that 5 -- 4 and 5
15 actually should move down. I think 4 could be where it is,
16 but 5 should probably be attached to the 42,590 rather than
17 sitting out there next to zero.

18 Q Okay. Let me read 5 here. This model is -- in
19 Footnote 5, this model assumes that Dr. Browning would find
20 employment with annual income similar to her former salary
21 level, now larger with annual increases in 2004 and 2006?

22 A Yeah, that's --

23 Q Can you explain that footnote to me?

24 A No.

25 Q Okay.

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1 A I don't know where that -- I think that's coming
2 from Table 2, which is historic, where I continue out her
3 income -- let me see. What is Footnote 4 saying there?

4 MS. FEDELE: I've lost track. Which table
5 are we on?

6 THE WITNESS: We're on Table 3.B.

7 Q (BY MS. BENEDICT) You were looking at 2.A?

8 A Right. I'm looking at 2.A and 2.B to see what
9 line got copied mistakenly. I think what happened is
10 that -- I can see where it came from. Footnote 5 in 3.B is
11 very similar to Footnote 5 in 3.A. And when I copied the
12 table and edited, I didn't finish the editing of the
13 footnote. I should have and didn't.

14 Q In -- for 3.A or 3.B?

15 A Well, for 3.B, because I think Footnote 5 in
16 Table 3.A is okay. It recognizes the difficulty of finding
17 a comparable position. So we leave it at zero, as we said
18 15 minutes ago. But it's not what I wanted when I got to
19 3.B. I wanted to give Lauren Browning a salary based on
20 another field entirely, just a science teacher, but I
21 didn't discuss that at all in the footnote.

22 Q So Footnote 5 in 3.B really has no application --

23 A Right.

24 Q -- in this scenario?

25 A The Footnote 5 should say, this model assumes

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1 geoscientists in San Antonio, but rather the average salary
2 entry level plus three percent increase for public high
3 school teachers?

4 A Right, that -- yes, or public school teachers.

5 Q At what point do -- what point do you go from
6 becoming an entry level teacher to an experienced teacher
7 such that you would reflect a greater salary rather than
8 continuing to perpetuate the entry level salary?

9 A That is a very good question. I don't know.

10 Q Do you, in fact, do that in this chart 3.B?

11 A Well, I can't say explicitly I do, no.

12 Q Based on your understanding of how you've done
13 Column 4, is it correct that you have taken the entry level
14 salary and increased it at the rate of approximately three
15 percent per year through the year 2022?

16 A I have.

17 Q And at no time do you up that calculation to
18 reflect the experienced salary reflected for a public high
19 school teacher average salary?

20 A It -- it's a fair characterization that I don't.
21 I'm not sure how I would, but I don't in any case.

22 Q And if you were to be given her -- so basically
23 for the 15-year period on this chart, Dr. Browning is being
24 treated as an entry level teacher for 15 years?

25 A Well, that's a good question, and I don't think I

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1 could say -- what I would say is, that's certainly -- that
2 column ought to be looked at again. Let me say this: I
3 ought -- methodologically, I ought to go to the tracer 2
4 data and look at the four categories as we've defined them
5 for teachers and look at the differential between entry and
6 experienced.

7 The entry is going to be today 39,000.
8 Maybe the experienced is 47, hypothetically. If that
9 differential exists, then at some point in Column 4 it
10 would behoove me to raise the salary just a step up to
11 reflect experience, \$7,000. I haven't done that, but I
12 would certainly entertain the fact, and I would tell the
13 attorneys here that probably ought to be considered.

14 Q And then that would be reflected in the 3 percent
15 increases in every year thereafter?

16 A Right, then that -- that -- once she made the
17 hurdle, then she still grow to three percent.

18 Q And that cumulative affect would, again, reduce
19 your present value of lost income from the current 617,939
20 to some number less than that?

21 A It would, all things being equal, yes.

22 Q Dr. Burkman, is it the MSA data that you're
23 referring to from which the teacher salary and from which
24 the experienced geoscientist salaries were derived off the
25 tracer 2 ,was that your work materials, the notebooks 1, 2

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1 Q In that category of beginning salary, you don't
2 know if we're talking about the newly graduated teacher
3 or from -- from the University of Texas or someone in
4 Dr. Browning's position holding a doctorate degree and ten
5 years of experience?

6 A Right, we -- we don't know. There's no
7 credentials that go with this number.

8 Q Do you know if there is a difference in the
9 salary that is paid to secondary school teachers possessing
10 a Ph.D. as opposed to a bachelor's?

11 A Well, I don't know exactly. It's my experience
12 that advanced degrees allow for a higher start rate.

13 Q Any source that you would go to that would
14 reflect that information or would it be reflected on a
15 different portion of this MS -- tracer 2 material that
16 we're looking at?

17 A Well, again, two responses there. The 46,000
18 would include everyone. So even the highly talented, as
19 well as the totally green and bachelor degree holders would
20 be included there. Anyone who started. I think it's safe
21 to assume that in any one year a couple of advanced degree
22 holders would be in the pool.

23 But if we really wanted to know what the
24 district pays an advanced degree holder, over and above the
25 kind of entry level that would offer to everyone on

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1 average, we'd probably need to ask -- I need to go -- well,
2 of course, this isn't the district, is it? This is the MSA
3 again. You probably can't find that number.

4 Q It would be district specific as opposed to MSA?

5 A Yeah. You'd probably have to look at every
6 district in MSA and then take an average. That would be
7 quite a job, but it could be done.

8 Q Is there any reason to believe that someone
9 possessing, even though they may be an entry level teacher,
10 that if they come with the experience of a Ph.D., they are
11 started at an experienced -- as an experienced wage earner
12 as opposed to an entry level?

13 MS. FEDELE: Objection to this whole line of
14 questioning as going to -- it's asking for testimony that
15 goes beyond the witness's field of expertise.

16 Q (BY MS. BENEDICT) I would disagree only because
17 the numbers are used in the expert's report.

18 A Well, I -- now I have to remember your question.
19 Your question relates to --

20 Q Whether an individual possessing an advanced
21 degree would come in at an experienced wage earner level as
22 opposed to an entry level.

23 A You know, I just have to say, I don't know, which
24 doesn't -- you're right. I should know that if I'm
25 speculating that she comes in at an entry. I just expect,

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1 and I think my report assumes, that people who have never
2 taught before are entry level.

3 Q Would you expect that Dr. Browning, with an
4 advanced degree, would, however, come in at the high end of
5 even the average of entry level?

6 A Yes, I would expect that.

7 Q You were graciously trying to point me in the
8 right direction for the geo --

9 A Okay.

10 Q -- scientist.

11 A You just have to turn a few pages past some of my
12 notes, handwritten notes and things and just maybe eight or
13 ten pages and you'll come to a page. There -- let's see.
14 You'll come to a page that looks like this (indicating).
15 It has a bar chart on the left. Keep going.

16 Q Yes.

17 A Yes. Okay. That -- well, that's a portion in
18 the upper right-hand corner of wage information for
19 geoscientists, except hydrologists and geographers as it
20 says there (indicating), in the San Antonio MSA from '99 to
21 2004. This is, again, something that we all can log onto
22 the web site. You can see the web site URL at the bottom
23 of the page. And what this is telling us is that in the
24 year 2004, an experienced -- the wages of an experienced
25 geoscientist were 75,363, according to the state.

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1 Of note, looking at 3.B, although I said I
2 was about to move onto the last one --

3 A Okay.

4 Q -- looking at 3.B, I note in this scenario, you
5 do not put Dr. Browning back to work until 2008 as opposed
6 to 2007 --

7 A Right.

8 Q -- which would reflect 182 weeks of unemployment
9 or three and-a-half years. Why?

10 A I -- you know, I saw that earlier and didn't
11 comment on it. I -- as I sit here, I'm not sure why, but
12 I'm thinking that I might have said, well, let's -- she's
13 going to have to get certified before she can teach, but
14 that -- it may be that you could spend your first year
15 teaching as long as you're telling them you're getting
16 certified.

17 You know, the -- Texas is very loose on
18 certifications for people they need, science and math
19 teachers. I mean I know that historically.

20 Q Okay.

21 A So if you're a scientist or a mathematician and
22 you don't have certification to get into the public school
23 system, if you're working on -- if you want to go to work
24 for them and you tell them, I am getting certified, I'm
25 going to the local university to make those courses up, you

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1 you, in estimating expected earnings or in lost income,
2 utilize any of Southwest Research Institute's own salary
3 ranges for the SE-2 or SE-3 position?

4 A Well, I think, as I said earlier, I -- I looked
5 at those. Ultimately, when I produced the report, I did.
6 I don't think that I brought in any of those numbers.

7 Q And on what basis, Dr. Burkman, would you use
8 theoretical numbers as opposed to the actual salary ranges
9 for the SE-2 position at Southwest Research Institute?

10 A Well, I think it's my understanding, as I said
11 much earlier, that Dr. Browning claims -- and I wrote that
12 in my report -- that she was more an SE-3 or an SE-4 in her
13 job duties. You reminded me that SE-4 has been ruled as
14 not admissible, and I -- I needed something -- I needed
15 something above SE-2, and I didn't see it in the data that
16 I received.

17 Q Well, let me refer you to notebook Exhibit 2,
18 which is in the document EEOC0557. It, in fact, has salary
19 ranges for SE-3, does it not?

20 A Yes, it does. It appears to be so.

21 Q And in such case, Dr. Burkman, would you think it
22 more reliable to rely -- to look at the actual salary
23 ranges for the SE-3 position of employees at Southwest
24 Research Institute as opposed to hypothetical information?

25 A I think it would be appropriate to -- to look at

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1 that SE-3 data. Somehow that escaped me, because I'm -- of
2 course, I provided -- well, I'm supposing -- no, I -- I
3 didn't provide this to you, but I'm going to assume that
4 it's in my set.

5 Q Actually, you did. It's out of notebook 2.

6 A Okay. It is. All right. Then I -- I just
7 overlooked it.

8 Q And do you think it would be more reliable to
9 utilize the actual salary ranges for employees at Southwest
10 Research Institute for assessment of expected earnings and
11 arguments of lost income as opposed to hypothetical MSA
12 numbers?

13 A It would provide another insight. I'm not sure
14 it's more reliable, but it's certainly -- it would -- it
15 would be employer specific at the range I was attempting to
16 get to. So, yes, I can't say that that would be
17 inappropriate. That would be, yet, another measure.

18 Q Do you think utilizing Southwest Research
19 Institute numbers for actual salary ranges would be a
20 better comparison than the Texas-wide and nationwide
21 number, reflected in Appendix 1, Table A1A -- excuse me --
22 A1.1?

23 A Well, what I was trying to show there -- I think
24 what I've got in that table is appropriate. Maybe we'd
25 want to have another column that showed SE-3, because what